What is claimed is:

1. A caching system for a satellite communications system, the caching system comprising:

a remote client station requesting a selected data page from a host station that is connected to a communications network, the remote client station being coupled to the communications network through the satellite communications system; and

a cache storing information forming at least a portion of at least one data page, the cache receiving the request for the selected data page and determining whether at least a portion of information forming the selected data page is stored in the cache, when information forming the selected page is stored in the cache, the cache sends the information forming the selected page that is stored in the cache to the remote client station, and the cache further sending a request to the host station through the satellite communications system for information forming the selected data page that is not stored in the cache.

2. The caching system according to claim 1, wherein the remote client station is a VSAT-based client station.

3. The caching system according to claim 1, wherein the remote client station is co-located with the cache.

4. The caching system according to claim 1, wherein the remote client station is coupled to the cache through a satellite communication link.

5. The caching system according to claim 1, wherein the cache has a first portion and a second portion, and

wherein the remote client station is co-located with the first portion of the cache and is coupled to the second portion of the cache through a satellite communication link.

6. The caching system according to claim 5, wherein the second portion of the cache is connected to the communications network.

7. The caching system according to claim 5, wherein the cache includes a third portion that is coupled to the communications network, and

wherein the second portion of the cache is coupled to the third portion of the cache through another satellite communication link.

8. The caching system according to claim 1, wherein the host station is a server and the communications network is the Internet.

9. The caching system according to claim 1, wherein the requested data page is a home page for the remote client station.

10. The caching system according to claim 1, wherein the requested data page is a favorite data page for the remote client station.

11. The caching system according to claim 1, wherein the cache determines whether the requested data page is a favorite data page based on a frequency that the data page is requested.

12. The caching system according to claim 1, wherein the requested data page is one of a home page and a favorite page for the remote client station, the cache pre-fetching the requested data page and at least one object contained in the requested data page before the request for the data page is received from the remote client station.

13. The caching system according to claim 12, wherein the cache forms a data cluster from at least one object contained in the requested data page, and sends the data cluster to the remote client station.

14. The caching system according to claim 13, wherein the cache compresses the data cluster.

15. The caching system according to claim 13, wherein when the cache forms the data cluster, the cache multiplexes a plurality of objects contained in the requested data page.

16. The caching system according to claim 1, wherein the remote client station stores information forming the requested data page,

wherein the cache sends information to the remote client station indicating that the requested data page stored in the remote client station does not need to be updated when information stored in the cache forming the requested data page is up to date.

17. The caching system according to claim 1, wherein the selected data page includes information forming a base page,

the cache sending the base page to the remote client station when information forming the base page is stored in the cache and sending a request to the host station through the satellite communications system for information forming the base page that is not stored in the cache.

18. The caching system according to claim 17, wherein the cache parses the base page and identifies objects contained in the base page, the cache sending at least one identified object contained in the base page and that is stored in the cache to the remote client station when the at least one identified object contained the base page is stored in the cache and sending a request to the host station through the satellite communications system for each identified object contained in the base page that is not stored in the cache.

19. The caching system according to claim 18, wherein at least one identified object is an in-line object.

20. The caching system according to claim 18, wherein at least one identified object is a dynamically-embedded object.

21. The caching system according to claim 18, wherein the remote client station receives the base page and the at least one identified object from the cache, and displays the information forming the base page for a predetermined period of time before displaying the at least one identified object contained in the base page.

22. The caching system according to claim 17, wherein the at least one identified object is sent to the remote client station after a predetermined period of time elapses after the base page is sent to the remote client station.

23. The caching system according to claim 17, wherein the cache parses the base page and identifies objects contained in the base page,

wherein the cache includes a linked list of objects stored in the cache, and

wherein the cache sends at least one identified object contained in the base page and that is included in the linked list of objects to the remote client station when the at least one identified object contained the linked list of objects is stored in the cache and sends a request to the host station through the satellite communications system for each identified object contained in the linked list of objects that is not stored in the cache.

24. The caching system according to claim 23, wherein the cache sends the linked list of objects to the remote client station, the remote client station synchronizing a list of objects stored at the remote client station with the received linked list of objects stored in the cache.

25. The caching system according to claim 23, wherein the cache receives a list of objects stored at the remote client station from the remote client station, the cache synchronizing the linked list of objects stored in the cache with the received list of objects stored at the remote client station.

26. The caching system according to claim 23, wherein the cache receives from the remote client station information relating to an object handling capability of a browser operating in the remote client station, the cache determining which objects contained in the requested base page to send to the remote client station based on the received information relating to the object handling capability of the browser.

27. The caching system according to claim 1, wherein the selected data page includes information forming a base page,

wherein the information forming the base page is stored in the cache; and

wherein the cache receives periodic updates of the information forming the base page from a server hosting the base page.

28. The caching system according to claim 27, wherein the periodically received information received by the cache is received from a multicast transmission.

29. The caching system according to claim 1, wherein the remote client station sends the request for the selected data page to the cache through a tunnel.

30. The caching system according to claim 29, wherein the cache sends the information forming the selected page that is stored in the cache to the remote client station through a tunnel.

31. A method for caching data in a satellite communications system, the method comprising steps of:

requesting at a remote client station a selected data page from a host station that is connected to a communications network, the remote client station being coupled to the communications network through the satellite communications system;

storing information forming at least a portion of at least one data page in a cache;

receiving the request at the cache for the selected data page;

determining whether at least a portion of information forming the selected data page is stored in the cache;

sending the information forming the selected page that is stored in the cache from the cache to the remote client station when information forming the selected page is stored in the cache; and

sending a request from the cache to the host station through the satellite communications system for information forming the selected data page that is not stored in the cache.

32. The method according to claim 31, wherein the remote client station is a VSAT-based client station.

33. The method according to claim 31, wherein the remote client station is co-located with the cache.

34. The method according to claim 31, wherein the remote client station is coupled to the cache through a satellite communication link.

35. The method according to claim 31, wherein the cache has a first portion and a second portion, and

wherein the remote client station is co-located with the first portion of the cache and is coupled to the second portion of the cache through a satellite communication link.

36. The method according to claim 35, wherein the second portion of the cache is connected to the communications network.

37. The method according to claim 35, wherein the cache includes a third portion that is coupled to the communications network, and

wherein the second portion of the cache is coupled to the third portion of the cache through another satellite communication link.

38. The method according to claim 31, wherein the host station is a server and the communications network is the Internet.

39. The method according to claim 21, wherein the requested data page is a home page for the remote client station.

40. The method according to claim 31, wherein the requested data page is a favorite data page for the remote client station.

41. The method according to claim 31, further comprising a step of determining at the cache whether the requested data page is a favorite data page based on a frequency that the data page is requested.

42. The method according to claim 31, wherein the requested data page is one of a home page and a favorite page for the remote client station,

the method further comprising a step of pre-fetching the requested data page and at least one object contained in the requested data page before the request for the data page is received from the remote client station.

43. The method according to claim 42, further comprising steps of:

forming a data cluster at the cache from at least one object contained in the requested data page; and

sending the data cluster from the cache to the remote client station.

44. The method according to claim 43, further comprising a step of compressing the data cluster at the cache.

45. The method according to claim 43, further comprising a step of multiplexing a plurality of objects contained in the requested data page when the cache forms the data cluster.

46. The method according to claim 31, wherein the remote client station stores information forming the requested data page,

the method further comprising a step of sending from the cache information to the remote client station indicating that the requested data page stored in the remote client station does not need to be updated when information stored in the cache forming the requested data page is up to date.

47. The method according to claim 31, wherein the selected data page includes information forming a base page,

the method further comprising steps of:

sending the base page from the cache to the remote client station when information forming the base page is stored in the cache; and

sending a request to the host station through the satellite communications system for information forming the base page that is not stored in the cache.

48. The method according to claim 47, further comprising steps of:

parsing the base page at the cache;

identifies objects contained in the base page,

sending at least one identified object contained in the base page and that is stored in the cache from the cache to the remote client station when the at least one identified object contained the base page is stored in the cache; and

sending a request to the host station through the satellite communications system for each identified object contained in the base page that is not stored in the cache.

49. The method according to claim 48, wherein at least one identified object is an in-line object.

50. The method according to claim 48, wherein at least one identified object is a dynamically-embedded object.

51. The method according to claim 48, further comprising steps of:

receiving at the remote client station the base page and the at least one identified object from the cache, and

displaying the information forming the base page for a predetermined period of time before displaying the at least one identified object contained in the base page.

52. The method according to claim 47, further comprising a step of sending the at least one identified object to the remote client station after a predetermined period of time elapses after the base page is sent to the remote client station.

53. The method according to claim 47, wherein the cache includes a linked list of objects stored in the cache,

the method further comprising steps of:

parsing the base page at the cache;

identifying at the cache objects contained in the base page;

sending from the cache at least one identified object contained in the base page and that is included in the linked list of objects to the remote client station when the at least one identified object contained the linked list of objects is stored in the cache; and

sending from the cache a request to the host station through the satellite communications system for each identified object contained in the linked list of objects that is not stored in the cache.

54. The method according to claim 53, further comprising steps of:

sending from the cache the linked list of objects to the remote client station, and

synchronizing at the remote client station a list of objects stored at the remote client station with the received linked list of objects stored in the cache.

55. The method according to claim 53, further comprising steps of:

receiving at the cache a list of objects stored at the remote client station from the remote client station; and

synchronizing at the cache the linked list of objects stored in the cache with the received list of objects stored at the remote client station.

56. The method according to claim 53, further comprising steps of:

receiving at the cache from the remote client station information relating to an object handling capability of a browser operating in the remote client station; and

determining at the cache which objects contained in the requested base page to send to the remote client station based on the received information relating to the object handling capability of the browser.

57. The method according to claim 31, wherein the selected data page includes information forming a base page,

the method further comprising steps of:

storing the information forming the base page in the cache; and

receiving at the cache periodic updates of the information forming the base page from a server hosting the base page.

58. The method according to claim 57, wherein the periodically received information received by the cache is received from a multicast transmission.

59. The method according to claim 31, further comprising a set of sending from the remote client station the request for the selected data page to the cache through a tunnel.

60. The method according to claim 59, further comprising a step of sending from the cache the information forming the selected page that is stored in the cache to the remote client station through a tunnel.

61. A multicast system, comprising:

a server content evaluator connected to a computer network, the computer network containing a plurality of stored pages of information each having a predetermined format, the server content evaluator determining in whether a particular page is capable of being multicast to a plurality of client applications and assigning a unique index number to each page determined to be capable of being multicast to a plurality of client applications; and

a server content cache coupled to the server content evaluator storing index numbers assigned to pages of information determined to be capable of being multicast to a plurality of client applications,

the server content evaluator receiving a request from a client application for a selected page of information and sending the index number for the selected page to the client application when the selected page has an assigned index number stored in the server content cache.

62. The system according to claim 61, wherein the server content evaluator receiving the selected page of information from the computer network when the selected page of information does not have an assigned index number, determining whether the selected page is capable of being multicast to a plurality of client applications, and assigning a unique index number to the selected page when the selected page is determined to be capable of being multicast to a plurality of client applications, the server content evaluator sending the assigned index number for the selected page to the client application.

63. The system according to claim 62, further comprising a server multicast engine coupled to the server content evaluator, the server multicast engine sending the selected page of information to the client application when the server content evaluator determines that the selected page of information does not have an assigned index number, receives the selected page of information from the computer network and then assigns the unique index number to the selected page.

64. The system according to claim 63, wherein the predetermined format is HTML.

65. The system according to claim 63, wherein the computer network is the Internet.

66. The system according to claim 63, wherein the request for the selected page of information is received from a satellite communication link.

67. The multicast system according to claim 63, further comprising:

a client content synchronizer receiving the request from the client application for the selected page of information, the client content synchronizer sending the request for the selected page of information to the server content evaluator and receiving the index number assigned to selected page of information from the server evaluator; and

a client content cache coupled to the client content synchronizer storing pages of information, each page of information have an assigned index number,

the client content synchronizer sending the received index number for the selected page of information to the client content cache and receiving the selected page of information corresponding to the received index number, the client content synchronizer sending the selected page of information to the client application.

68. The multicast system according to claim 67, further comprising a client multicast engine coupled to the client multicast cache, the client multicast engine receiving the selected page of information from a server multicast engine when the selected page of information is not stored in the client content cache.

69. The multicast system according to claim 68, wherein the index number assigned to the selected page of information is received from a satellite communication link.

70. The multicast system according to claim 68, wherein the selected page of information is received from a satellite communication link when the selected page of information is not stored in the client content cache.

71. A multicast system, comprising:

a client content synchronizer receiving a request from a client application for a selected page of information, the selected page of information being stored on a computer network in a predetermined format that is capable of being multicast to a plurality of client applications, the client content synchronizer sending the request for the selected page of information to a server content evaluator and receiving an index number assigned to selected page of information from the server evaluator; and

a client content cache coupled to the client content synchronizer storing pages of information, each page of information have an assigned index number,

the client content synchronizer sending the received index number for the selected page of information to the client content cache and receiving the selected page of information corresponding to the received index number, the client content synchronizer sending the selected page of information to the client application.

72. The system according to claim 71, further comprising a client multicast engine coupled to the client multicast cache, the client multicast engine receiving the selected page of information from a server multicast engine when the selected page of information is not stored in the client content cache.

73. The system according to claim 72, wherein the predetermined format is HTML.

74. The system according to claim 72, wherein the computer network is the Internet.

75. The system according to claim 72, wherein the index number assigned to the selected page of information is received from a satellite communication link.

76. The system according to claim 72, wherein the selected page of information is received from a satellite communication link when the selected page of information is not stored in the client content cache.

77. A method for multicasting data, the method comprising steps of

receiving a request at a server content evaluator from a client application for a selected page of information, the server content evaluator being connected to a computer network, the computer network containing a plurality of stored pages of information each having a predetermined format;

determining whether the selected page has a unique index number stored in a server content cache;

when the selected page does not have a unique index number stored in the server content cache, requesting the selected page from the computer network;

determining whether the received selected page is capable of being multicast to a plurality of client applications;

assigning a unique index number to the received selected page when the selected page is determined to be capable of being multicast to a plurality of client applications; and

sending the index number for the selected page to the client application.

78. The method according to claim 77, further comprising a step of sending the index number for the selected page to the client application when the selected page has a unique index number stored in the server content cache.

79. The method according to claim 77, further comprising a step of sending the selected page of information to the client application when the selected page of information is determined to not have an assigned index number when the selected page was requested.

80. The method according to claim 77, wherein the predetermined format is HTML.

81. The method according to claim 77, wherein the computer network is the Internet.

82. The method according to claim 77, wherein the request for the selected page of information is received from a satellite communication link.

83. The method according to claim 77, further comprising steps of:

receiving the request from the client application for the selected page of information at a client content synchronizer;

sending the request for the selected page of information to the server content evaluator;

receiving the index number assigned to selected page of information from the server evaluator; and

receiving the selected page of information from a client content cache based on the index number assigned to the selected page of information.

84. The method according to claim 83, further comprising a step of receiving the selected page of information from a server multicast engine when the selected page of information is not stored in the client content cache.

85. The method according to claim 84, wherein the index number assigned to the selected page of information is received from a satellite communication link.

86. The method according to claim 84, wherein the selected page of information is received from a satellite communication link when the selected page of information is not stored in the client content cache.

87. A method for multicasting data, the method comprising steps of:

receiving a request from a client application at a client content synchronizer for a selected page of information, the selected page of information being stored on a computer network in a predetermined format that is capable of being multicast to a plurality of client applications;

sending the request for the selected page of information to a server content evaluator;

receiving an index number assigned to selected page of information from the server evaluator;

sending the received index number for the selected page of information to a client content cache;

receiving the selected page of information corresponding to the received index number, and

sending the selected page of information to the client application.

88. The method according to claim 87, further comprising a step of receiving the selected page of information from a server multicast engine when the selected page of information is not stored in the client content cache.

89. The method according to claim 87, wherein the predetermined format is HTML.

90. The method according to claim 87, wherein the computer network is the Internet.

91. The method according to claim 87, wherein the index number assigned to the selected page of information is received from a satellite communication link.

92. The method according to claim 87, wherein the selected page of information is received from a satellite communication link when the selected page of information is not stored in the client content cache.

93. A method for caching data in a satellite communications system, the method comprising steps of:

storing information forming at least a portion of at least one data page in a cache;

receiving a request from a remote client station for selected information, the selected information being hosted at a host station that is connected to a communications network, the remote client station being coupled to the communications network through the satellite communications system;

determining whether the request for the selected information is a request for an HTML file;

when the request is for an HTML file, determining whether at least a portion of information forming the HTML file is stored in the cache;

sending the information forming the HTML file that is stored in the cache from the cache to the remote client station when information forming the HTML file is stored in the cache; and

sending a request from the cache to the host station through the satellite communications system for information forming the HTML file that is not stored in the cache.

94. The method according to claim 93, further comprising steps of:

pre-fetching the information forming the HTML file before the request for the HTML file is received from the remote client station; and

storing the pre-fetched information forming the HTML file in the cache.

95. The method according to claim 93, further comprising steps of:

determining whether the request for the selected information is a request for an object;

when the request for the selected information is a request for an object, determining whether the requested object is stored in the cache;

sending the object that is stored in the cache from the cache to the remote client station when object is stored in the cache; and

sending a request from the cache to the host station through the satellite communications system for the object when the object is not stored in the cache.

96. The method according to claim 95, further comprising steps of:

receiving the object from the host station; and

sending the received object to the remote client station.